## II. Remarks

Reconsideration and allowance of the subject application are respectfully requested.

Claims 5-9 are pending in the application. Claims 5, 7, and 8 are independent. Claim 6 is indicated as containing allowable subject matter. Applicant has added new dependent Claim 9 to afford himself a scope of protection commensurate with the disclosure. The new claim is fully supported in the specification and Drawings, and is believed to be allowable for the reasons to be developed below.

Claims have been amended for clarity with respect to the specification and drawings, and not for any reason related to a statutory requirement for patentability.

Claims 5, 7, and 8 were rejected as being unpatentable over Anvari, for the reasons discussed on pages two and three of the Office Action. Applicant respectfully traverses all art rejections.

It appears from the Office Action that the Examiner believes that the switch 213 in Anvari could operated in manner similar to that claimed in the subject application, presumably because in Figure 1 of Anvari both what we call a "signal-power detector/processor" and what we call an "intermodulation detector/processor" are lumped together as "glue logic". In fact, Anvari does not suggest operating his device in the way that we claim. The only passages in the Anvari that mention the switch 213 are the following, which

13

are found in four paragraphs at column 11 line 64 to column

12 line 23 (emphasis added):

> In this particular embodiment, the
> adaptive controller comprises the same
> three sub-units as in the embodiment
> described above, namely the RF sub-unit,
> the digital hardware sub-unit, and an
> adaptive controller algorithm.  However,
> as shown in FIG. 1, signals from J8 and
> J9 are applied to switch (SW) 213 which
> chooses one of the signals J8 or J9
> before applying it to mixer 205.  Switch
> 213 is controlled by a control signal
> from glue logic 309, produced from an
> algorithm executed in DSP 310.
>
> Since the strength of the desired, in-
> band signals is larger at J9 than at J8,
> the signal at J9 is preferably used to
> locate the frequency of the desired
> carriers.  Note the process of detecting
> the frequency of desired carrier signals
> can be performed in parallel with
> minimizing the distortion at output 116
> by using switch 213.
>
> When switch 213 is switched to J9, the RF
> sub-unit path from mixer 209, through BPF
> 210 and mixer 211, to BPF 212 is used to
> collect and sample signals used to
> generate control signals which will
> minimize distortion. At the same time, RF
> sub-unit path from mixer 205, through BPF
> 206 and mixer 207, to BPF 208 is used to
> locate the frequency of desired carrier
> signals.
>
> When switch 213 is switched to J8,
> coupler 110 is sampled for wanted signals
> at the output of 109, the measurement of
> which are used to produce the control
> signals which alter attenuator 102 and
> phase shifter 103, and thus maintaining
> distortion-free amplifier output.

These passages do not suggest using the signal-

power detector/processor to minimize intermodulation after

14

startup. Instead, they appear to describe switching part of the RF sub-unit between locating the frequencies of desired carrier signal and sampling the feed-forward signal. The latter function may be somewhat analogous to the claimed signal-power detector/processor being connected to cancellation point of the signal cancellation loop. However, the other switch position does not cause the signal-power detector/processor to sample the intermodulation at the output and use the sample to control the signal cancellation loop as claimed in the subject application.

The bulk of Anvari appears to be related to determining where channels are so that distortion can be measured. This is for a multi-channel amplifier, describing. There is nothing in Anvari that relates to transitioning the control of the first cancellation loop from a power detector to an IM detector. In short, there is no similarity or overlap.

Accordingly, the salient claimed features of the present invention are nowhere disclosed by the cited art.

In view of the above, it is believed that this application is now in condition for allowance, and a Notice thereof is respectfully requested.

15

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 625-3507. All correspondence should continue to be directed to our address given below.

Respectfully submitted,


___/Richard P. Bauer/_____
Attorney for Applicants
Richard P. Bauer
Registration No. _31,588_____

PATENT ADMINISTRATOR
KATTEN MUCHIN ROSENMAN LLP
1025 Thomas Jefferson Street, N.W.
East Lobby, Suite 700
Washington, D.C.  20007-5201